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What is Claimed Is:

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CLAIMS

A method of transmitting signalling reports from a mobile station to a serving base station in a cellular communications system comprising a network infrastructure and a plurality of base stations connected thereto, said method comprising transmitting radio measurement reports intended for use by said serving base station to allocate a radio resource to said mobile station, and transmitting a radio resource signalling report intended for use by a service node in said network infrastructure to allocate a radio resource to said mobile station.

2. A method of transmitting signalling reports from a mobile station to a cellular communications system comprising a plurality of base stations including a base station serving said mobile station via a radio link, said method comprising encapsulating a radio resource signalling report before transmission over said radio link, such as to prevent said serving base station from intercepting said radio resource signalling report.

3. A method according to claim 1 or 2, comprising encapsulating said radio resource signalling reports in the form of a mobile-originating SMS message.

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4. A method according to claim 1, 2 or 3, comprising transmitting said radio resource signalling report during a dedicated channel traffic connection for said mobile station.

5 5. A method according to any preceding claim, said radio resource signalling report comprising downlink quality data measured for said serving base station.

10 6. A method according to any preceding claim, said radio resource signalling report comprising signal strength data measured for neighbouring cell base stations.

15 7. A method according to any preceding claim, said radio resource signalling data comprising data specifying the current requirements of said mobile station.

20 8. A method according to claim 7, said current requirements comprising bandwidth signal-to-noise ratio, radio path loss, cost and/or quality of service requirements.

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9. A method according to any preceding claim, comprising transmitting said radio resource signalling report in response to a request from said cellular communications system.

5 10. A method according to any of claims 1 to 8, comprising transmitting said radio resource signalling report in response to a request from said user.

10 11. A method of transmitting radio resource signalling reports from a mobile station in a cellular communications system, comprising transmitting said reports in the form of mobile-originating SMS messages.

12. A mobile station adapted to perform the method of any of claims 1 to 11.

15 13. A cellular communications system comprising a plurality of base stations for conducting communications with mobile stations via a radio interface, and a service node for receiving radio resource signalling reports generated by mobile stations when in connected mode in said system, said
20 system being arranged to route said reports from said plurality of base stations to said service node.

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14. A system according to claim 13, wherein said radio resource signalling reports comprise downlink quality data measured by said mobile stations and/or neighbour cell signal strength data measured by said mobile stations.

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15. A system according to claim 13 or 14, wherein said radio resource signalling reports comprise data specifying bandwidth, cost and/or quality of service requirements for said mobile stations.

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16. A system according to claim 13, 14 or 15, wherein said service node is adapted to select radio access nodes to be allocated to said mobile stations on the basis of said reports.

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17. A system according to claim 16, wherein said service node is adapted to select radio access nodes to be allocated to said mobile stations on the basis of individual bandwidth, quality of service and/or cost requirements for said mobile stations.

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18. A system according to any of claims 13 to 17, wherein said base stations are adapted to select radio resources to be allocated to said mobile stations on the basis of radio measurement reports received from said mobile stations.

